

NOTES ON MESEMBRYANTHEMUM AND ALLIED GENERA

By H. M. L. BOLUS

Cephalophyllum artum L. Bol. sp. nov.—Planta 1 visa, compacta, cum floribus 12 cm. alta, primum ca. 15 cm. diam.; rami primarii arti decumbentes, interdum reptantes, feri 4—6 cm. longi, internodiis inclusis, culti ad 11 cm. longi, internodiis 1—2 cm. longis, ad 5 mm. diam.; ramuli ultimi 4—6-foliati; folia fere erecta, demum subpatentia, supra visa acuta vel acuminata, plana vel prope apicem convexula, dorso lateribusque convexis, vel novella interdum carinata, lat. visa prope apicem leviter angustata, acuta vel obtusa, levia politaque, 3—5 cm. longa, medio 5—9 mm. lata diametroque, vagina ad 8 mm. longa, pari secundo interdum primo longiore sed multo graciliore; flores 1—2-nati, feri 5—6.5 cm. diam., culti minores; pedunculi leviter intrusi, 3.5—5 cm. longi, basi bracteati, bracteis lat. visis acutis vel obtusis, 1.5—2 cm. longis, vagina ventricosa, 4—5 mm. longa; receptaculum breviter crateriforme, 2—3 mm. longum, 7—9 mm. diam.; sepala 5, exteriora superne incrassata obtuseque compressa, in flore maximo 7 mm. longa, basi 6—8 mm. lata, interiora 7—8 mm. longa, basi 5 mm. lata, apice brevissime subulata, ample marginata, marginibus crebre brunneo maculata; petala 2—3-seriata, parum inaequilonga, e supra medium inferne angustata interdumque subspathulata, apice saepius rotundata, laetissime purpureo-rosea, ad 3 cm., vel ad 2.2 cm., vel ad 1.9 cm., longa, 2—3 mm. lata; filamenta 3—4 seriata, rosea, ad 4 mm. longa, papillis brevissimis pallidis, antheris brunneis, polline roseobrunneo; ovarium e disco abrupte ad 2.5 mm. elevatum, lobis approximatis, dorso complanatis, prope apicem tantum compressis obtusisque; stigmata 10—13, subulata fimbriata, 4—5 mm. longa.

Cape Prov.: "Ceres Karoo, 15 m. N. of Karoo Poort on the road to Calvinia," July 1959, *H. Hall* 1742.

N.B.G. 508/59. Fl. Jul. 1961.

Cephalophyllum stayneri L. Bol. sp. nov.—Planta 1 visa, compacta fera, ad 32 cm. diam.; rami reptantes, ad 22 cm. elongati, internodiis saepius 2—3 cm. longis, ad 4 mm. diam., latere altero complanato, cum aetate anguste alato; ramuli ultimi erecti, saepius 6-foliati, internodiis inclusis; folia erecta vel ascendentia, supra complanata linearia, prope apicem leviter angustata, acuta, dorso rotundata, lateribus convexis, lat. visa apice vix angustata, obtusa, matura rarissime ad 5 cm., saepius 3—4 cm., infima ad 2 cm., longa cum vagina ad 3 mm. longa, medio 5—6 mm. lata diametroque; flores 1—2-nati, ad 5.4 cm. diam.; pedunculi

1—3.5 cm. longi, basi vel parum supra bracteati (internodio inter folia et bracteas incluso vel cum aetate ad 1.2 cm. longo), bracteis 8—20 mm. longis cum vagina 2—4 mm. longa; receptaculum subcrateriforme, 3—4 mm. longum, 7—8 mm. diam.; sepala 5, matura saepius saturate rubra, exteriora e parum supra medium leviter incrassata angustataque, acuta, interiore obtusa, brevissime subulata, 8—10 mm., vel in flore altero 9—11 mm., longa, basi 4—5 mm. lata; petala ca. 6-seriata, exteriora 3-seriata, e parum supra medium inferne angustata, apice rotundata vel rarius emarginata, interiora perpauca, conspicue emarginata, supra nitentissima, cupreo rubra (red burnished with copper), infra minus nitentia distincteque vittata, pallidiora, 8—24 mm. longa, 1—2.5 mm. lata; stamina expansa 1.1 cm. diam., filamentis ca. 4-seriata, laete luteis, antheris pollineque pallidioribus luteis; ovarium e disco gradatim vix ad 1 mm. elevatum, nitente tuberculatum, lobis approximatis obtuseque compressis; stigmata 10, subulata, demum fimbriata, 2.5—3 mm. longa.

Cape Prov.: in dit. Calvinia; Hantam River, Aug. 1961, *F.J. Stayner*. Karoo Garden 468/61.

Mr. Stayner writes: "Quite a remarkably beautiful range of colours exists in this species—cream, yellow, bronze, pink, mauve and orange".

Cephalophyllum pallens L. Bol. sp. nov.—Planta 1 visa quae ca. sex annorum est, ut videtur, compacta, 13 cm. alta, 17 cm. diam., caule 1.2 cm. diam.; rami primarii decumbentes, non radicales, mortui 6—8 cm., hornotini ad 9 cm., longi, 4—8 mm. diam., internodiis 3—15 mm. longis; ramuli ultimi 4—6-foliati, internodiis inclusis; folia fere erecta vel alterum paris subfalcatum, supra plana vel superne leviter convexa, prope apicem angustata, subacuta, dorso lateribusque convexis vel prope apicem obscure carinata, lat. visa prope apicem leviter angustata, obtusa, levia, pallide subglauca viridia, vel novella viridia, adulta 5—9.5 cm. longa, medio 5—7 mm. lata diametroque, vagina ad 7 mm. longa; flores 1—3-nati vel irregulariter 2-ternati; pedunculi gradatim in receptaculum transeuntes, ad 2.7 cm., fructiferi ad 3.7 cm., longi, laterales prope basin bracteati, bracteis carinatis, lat. visis abrupte acutis, lateribus convexis, 1—1.4 cm. longis, ad 3 mm. diam., vagina ad 5 mm. longa; receptaculum primo subobconicum vel fere semiglobosum, 4 mm. longum, 8 mm. diam., in fructu immaturo crateriforme, 1.3 cm. diam.; sepala 5, acuta, extima in dimidio inferiore plana, in superiore angustata subcompressaque interiora apice breviter subulata, 7—9 mm. longa, basi 5—6 mm. lata; petala 2-seriata, inferne e prope medium leviter angustata, obtusa lutea, infra rubre suffusa, supra prope apicem rubra, 1.8—2.1 cm. longa, 2—2.75 mm. lata; filamenta ca. 4-seriata, pallida vel citrina, ad 6 mm. longa, antheris pollineque pallide luteis, papillis albis; ovarium circa

marginem planum, lobis erectis obtusis, nitente tuberculatis, obtuse profundeque compressis, ad 2 mm. elevatis; stigmata 9—10, subulata, conspicue fimbriata, pallide viridia, ad 5 mm. longa; capsulae anni prioris infra semiglobosae, ad 5 mm. longae, supra ad 3 mm. elevatae, suturis compressis ringentibusque, ad 1.1 cm., expansae ad 2 cm., diam.

South-West Africa: "5 miles N. of Sendelings Drift", Mart. 1960, *H. Hall* 1870.

N.B.G. 176/60. Fl. 17.7.1961.

Cephalophyllum calvinianum L. Bol. sp. nov.—Planta 1 visa, fera compacta, ad 12 cm. diam., caule 1 cm. diam.; rami primarii 3—5 cm. longi, 6—7 mm. diam.; internodiis inclusis, 5—20 mm. longis; partes herbaceae leves, glaucae virides; folia ascendentia vel inferne subfalcata deinde erecta, supra plana, linearia acuta, dorso rotundata vel sat obscure carinata, lateribus convexulis, lat. visa prope apicem angustata, acuta, breviter molliterque apiculata, saepius 5—6 cm. longa, medio ad 5 mm. lata diametroque; flores solitarii, 4.4 cm. diam.; pedunculi ad 7 cm. longi, basi bracteati, bracteis sat inconspicue carinatis, ad 4.5 cm. longis cum vagina 3—5 mm. longa; receptaculum obconicum, in pedunculum gradatim transeuns, 5 mm. longum, ad 7 mm. diam.; sepala 5, exteriora e infra medium subulate acuminata, ad 1.3 cm., interiora 5—8 mm., longa, basi 3—5 mm. lata, membranis amplis; petala 3—4-seriata, interiora perpauca, sublaxa, inferne e supra medium sat conspicue angustata, saepius emarginata vel profunde 2-dentata, purpureo rosea, sat inconspicue vittata, 7—19 mm. longa, 1.5—2 mm. lata; stamina expansa 1.8 cm. diam., filamentis 4-seriatis, pallide vel saturate roseis, ad 7 mm. longis, antheris pollineque albidis; discus crebre crenulatus; ovarium ca. marginem complanatum, deinde ad 1.5 mm. elevatum, lobis inferne complanatis, deinde leviter compressis, apice rotundatis; stigmata 10, gracilia, e prope basim superne attenuata, albida, breviter papillata, 6.5 mm. longa.

Cape Prov.: in dit. Calvinia; Hantam. Fl. Aug. 1961. *F. J. Stayner*. Karoo Garden. N.B.G. 475/61.

Pherolobus maughanii N. E. Br. var. *stayneri* L. Bol. var. nov.—Plantae visae ad 15 cm. diam.; folia adulta saepe late spathulata, utrimque grosse papillata, ungue basi 5 mm. lata, lamina fere circulari, 2 cm. vel ultra lata; petala saepissime acuta, in alabastro maturo lutea, in flore maturo inferne albida, apicem versus pallidiore lutea, demum fere omnino albida, marcescentia fere rubra, ad 4 mm., saepius 2—3 mm., lata.

Cape Province: in dit. Calvinia; Hantam, Jul.—Aug. 1961, *F. J. Stayner*. Karoo Garden 448/61.

Mr. Stayner's collection of this beautiful annual is the third to be recorded—all from the same locality. The previous one, made in October

1949 by M. R. Levyns, was cited in our "Notes" (Vol. III : 231), and the type was described in 1928. In both the latter the petals were stated to be rose or pale rose. In this variety the petals are a rich butter-yellow on both surfaces in the mature bud and first expansion of the flowers, becoming paler from below upwards until finally the entire petal is a creamy white; the filaments are bright red and the rounded tips of the 5 lobes (alternating with the stigmas) shine like rubies immersed in a setting of the anthers, which vary in colour from dark red to red according to age. (A very small "looper" caterpillar was observed on one of the lobes and two of the others in the same flower appeared to have been despoiled.) The largest flower seen was 5.4 cm. in diameter. No mature fruit is yet available for description.

Mr. Stayner writes: "We camped in a field of *Pherolobus* on cleared ground below the Calvinia town dam, and they extended from Blaauw-krantz pass (Boskloof) up the sides of the Hantamberg to an altitude of 4,500 feet. It was associated with *Dorotheanthus apetalus*, which I have also seen associated with other species of this genus, but have not observed any hybridization. Its mimicry of the other species of *Dorotheanthus* is perfect."

Dorotheanthus stayneri L. Bol. sp. nov.—*Plantae vivae juveniles tantum visae, cum floribus ad 4 cm. altae, 3—5 cm. diam.; partes herbaceae rubescentes vel rubrae; folia anguste spatulata, ad 2 cm. longa, ad 6 mm. lata; pedunculi ad 2 cm. longi; receptaculum obconicum, ad 3.5 mm. longum, ad 6 mm. diam.; sepala subaequilonga obtusa, in flore maximo ad 9 mm., in ceteris 6—7 mm., longa, basi ad 4 mm. lata; petala 2-seriata, e medio vel infra inferne angustata, obtusa vel emarginata, purpureo rosea vel inferne pallidiora vel alba oculumque formantia, immo basi rubra, in flore maximo 2.2—2.5 cm. longa, ad 3 mm. lata; stamina ca. 4-seriata, aurea, primum prope basim leviter constricta incumbientiaque, deinde erecta, ad 3 mm. longa, intima basi luteo papillata; ovarium supra concavum; stigmata late patentia, fimbriata, ad 2 mm., vel in flore marcescente 3 mm., longa.*

Cape Prov.: in dit. Worcester; Matroosberg Station, *F. J. Stayner*. Karoo Garden 502/61. Fl. Aug. 1961. Typus. Tweedside, Sept. 1932, *W. F. Barker* 8594; on the farm "Avondrust", 4 miles E. of Touws River, Sept. 1959, *R. C. Littlewood*. Karoo Garden 513/59.

Dorotheanthus littlewoodii L. Bol. sp. nov.—*Plantae vivae plures visae, cum floribus ad 12 cm. diam.; folia spatulata, ad 5.5 cm. longa, unque basi dilatato rubroque, lamina apice rotundata vel obtusa, oblonga vel ovalis vel rarius fere circularis, adulta 9—15 mm. lata; flores demum ad 2.5 cm. diam.; pedunculi rubescentes, ad 5 cm. longi; receptaculum*

saepius brevissime crateriforme, 1.5—2 mm. longum, ad 6 mm. diam. sepala 5—8 mm., vel in flore marcescente ad 11 mm., longa, basi ad 4 mm. lata; petala 1—2-seriata, inferne leviter angustata, obtusa, inferne alba, superne pulchre rosea, utrinque saturatiore vittata, vittis conspicuoribus in dimidio inferiore, ad 1.3 cm. longa, 0.5—1 mm. lata, angustissima in genere visa; filamenta 3—4-seriata, diu incumbentia, interiora prope medium papillata, papillis pallidis, inferne pallida, superne rubra, ad 3 mm. longa, antheris pollineque laete luteis; ovarium circa marginem concavum vel planum, deinde ad 1 mm. elevatum, lobis dorso complanatis; stigmata 5, profunde posita, angustissime subulata, 1.5 mm., vel in floribus senectis 2 mm., vel in fructu immaturo ad 4 mm., longa.

Cape Prov.: in dit. Worcester; "6 miles W. of National Road turn-off to Ceres, 12 miles W. of Worcester," Sept. 1960, *R. C. Littlewood*. Karoo Garden 630/60. Fl. Aug. 1961.

Ruschia pauper L. Bol. sp. nov.—Rami feri plures visi, subrigidi glabri, aliter partes herbaceae velutinae ob papillas capillares minutas, cum aetate glabrescentes, ad 10 cm. longi, internodiis 1—2.5 cm. longis, ad 3 mm. diam.; ramuli floriferi saepius 2-foliati; folia sat diversiformia, diu fere erecta, demum fere patentibus, interdum inferne falcata, supra visa linearia prope apicem angustata, acuta vel interdum adulta breviora oblonga, apice rotundata, lat. visa ex infra medium superne ampliata, apice rotundata vel subtruncata, carinata, lateribus convexis, minute tuberculata, in siccis tuberculis prominentibus, sordide viridia, 1—3.5 cm. longa, vagina 1.5 mm. longa, medio 5—7 mm. lata, prope apicem 6—11 mm. diam.; flores pauperes, 3-nati vel demum, ut videtur, 2-ternati; pedunculi 5—8 mm., fructiferi ad 15 mm., longi, laterales parum infra medium bracteati, bracteis membranaceo marginatis, 3—6 mm. longis; receptaculum obconicum, ad 2.5 mm. longum, ad 3 mm. diam.; sepala 5, acuta vel extima interdum acuminata, 3—4 mm. longa, basi 1.5—3 mm. lata; petala 2-seriata, inferne leviter angustata, obtusa, rosea, 3—4 mm. longa, ad 0.5 mm. lata; staminodia non visa (? nulla); stamina non bene visa, ca. 4-seriata, filamentis albis, intimis prope apicem papillatis, ad 3 mm. longis, antheris pollineque luteis; discus crenulatus; ovarii lobi subapproximati, obtuse compressi, leviter elevati; stigmata 5, non bene visa; capsula ad 5 mm. longa, infra obconica, 2 mm. longa, supra ad 6 mm., expansa 10 mm., diam., suturis valde compressis, valvis late patentibus, textura tenui, carinis dimidium valvae attingentibus, aristis nullis, inferne parallelis distantibusque, superne leviter divergentibus, tuberculo magno obovato pallido.

Cape Prov.: Namaqualand; "4 miles S.E. of Jakkalswater, Maio 1961, *R. C. Littlewood*. Karoo Garden 211/61.

Ruschia deminuta L. Bol. sp. nov. (*Uncinata*).—Plantae ferae plures visae, arte compactae, subsemiglobosae glabrae, copiose ramuliferae, caule senecto ad 6 mm. diam.; folia dense imbricata, supra ovata, plana vel concava, leviter carinata, carina marginibusque cartilagineis, parce muricatis, lateribus convexis, crebre muricatis, lat. visa semiovata, apice subrotundata, pallide glaucae viridia, 3—5 mm. longa, 3—4 mm. lata diametroque, vagina ca. 1 mm. longa; pedunculi in bracteis inclusi vel breviter exserti, 1.5—2 mm., fructiferi ad 5 mm., longi; receptaculum obconicum, in pedunculum gradatim transeuns, 1.5—2 mm. longum, ad 4 mm. diam.; sepala 5, omnia $\pm$ ample marginata, muricata, 2.5—3 mm. longa, basi 1—2 mm. lata; petala ca. 3-seriata, inferne vix angustata, obtusa, pallidissime rosea, ad 6 mm. longa, ad 0.5 mm. lata; staminodia stamina conferta subaequantia; filamenta ca. 4-seriata, ad 3 mm. longa, interiora infra medium papillata, antheris pollineque luteis; ovarii lobi fere globosi, sat distantes, altitudinem disci leviter excedentes; stigmata 5, gracilia, e infra medium superne attenuata, ad 4 mm. longa; capsula infra obconica, ad 2.5 mm. longa, ad 5 mm., expansa 8 mm., diam., supra per 1.5 mm. elevata, suturis valde compressis.

South-West Africa: prope Aus, "on the farm Plateau at the summit of the plateau," Mart. 1960, *H. Hall* 1847. Fl. Nov. 1960. N.B.G. 563/60.

R. muricatae valde affinis fortasseque forma deminutissima.

Ruschia stayneri L. Bol. sp. nov. (*Microphylla*).—Plantae 3 visae, glabrae—prima caespitosa, cum floribus 4.5 cm. alta, 6 cm. et 7.5 cm. diam., caule 1.3 cm. diam.; rami primarii ad 5 mm. diam., internodiis inclusis; ramuli inferne reliquiis vaginarum imbricatis vestiti, ultimi 4—8-foliati; folia 4—7 mm. longa; secunda 7.5 cm. alta, 5 cm. diam., caule 6 mm. diam.; rami primarii ad 3 mm. diam., internodiis inclusis vel ad 1.6 cm. longis; tertia 22 cm. alta, 11 cm. diam., caule 1.1 cm. diam.; rami primarii senectissimi erecti lignosi rigidi, internodiis 1—2.5 cm. longis; ramuli hornotini herbacei steriles ad 16-foliati, ad 18 cm. longi, internodiis 6—20 mm. longis; ramuli floriferi 4—6-foliati; partes herbaceae tactu subvelutinae, demum politae, juniores virides; folia ascendunt vel in ramulis novellis diu erecta, supra plana, lanceolata vel linearia, acuta vel acuminata, acute carinata, lat. visa superne angustata, acuta, apice saepe subrecurva, apiculo minuto vel in novellis ad 1 mm. longo, 5—15 mm. longa, medio breviora ad 5 mm., longiora 1.5—3 mm., lata diametroque, vagina 2—3 mm., vel in foliis floribus subtendentibus ad 6 mm., longa; flores 2—2.5 cm. diam.; pedunculi 5—10 mm. longi; receptaculum subglobose obconicum, 2—3 mm. longum, 4—5 mm. diam.; sepala 5, e prope basim superne angustata, acuta vel acuminata, apiculata,

5—6 mm., vel in flore altero 6—7 mm., longa, basi 1·5—4 mm. lata; petala 3—4-seriata, inferne non, vel infra medium leviter, angustata, obtusa vel acuta, purpureo rosea, 6—10 mm. longa, 0·5—1 mm. lata; staminodia roseo purpurea, stamina conferta aequantia vel bene excedentia; filamenta ca. 5-seriata, prope basim pallida, aliter roseo purpurea, ad 4 mm. longa, interiora infra medium papillata, antheris polineque albis; ovarii lobi obtuse compressi, subdistantes, ad 0·75 mm. elevati; stigmata 5, gracilia, interdum sordide purpurea, 3—4 mm. longa.

Cape Prov.: in dit. Calvinia; Hantamberg, Jul. 1961, *F. J. Stayner*. Karoo Garden 450/61.

Mr. Stayner writes: "This is quite common above Calvinia. We saw it growing with *Pherolobus* at 4,500 feet altitude, unfortunately badly eaten. It flowers very densely indeed and will be a welcome addition to our flowering plants".

The long sterile branches of the year's long shoots are usually produced from near the base of the plant, and bear several closely imbricating sheathing remains at their base.

Lampranthus microsepalus L. Bol. sp. nov. (*Scabridi*).—Rami plures visi, 9—18 cm. longi, ad 3 mm. diam., internodiis saepius 1—2 cm. longis; folia in ramulis diu fere erecta, demum late ascendentia, prope apicem interdum recurva, obtuse carinata, lat. visa superne interdum leviter ampliata, apice oblique truncata vel obtusa vel rarius acuta, 8—10 mm. longa, 1—1·5 mm. diam.; flores solitarii, ad 2·2 cm. diam.; pedunculi 1—1·5 cm. longi; receptaculum obconicum, 2·5 mm. longum, ad 4 mm. diam.; sepala 5, subaequilonga, superne acuminate subulata, interioribus ample atro brunneo marginata, 3—3·5 mm., vel in alabastro ad 4 mm., longa, vel in floribus maturis exteriora interioribus interdum breviora, basi 2—3 mm. lata; petala sat laxe 2—3-seriata, inferne angustata, saepius obtusa vel rarius emarginata, rosea, marginibus saturationibus, in flore maximo 8—10 mm. longa; staminodia antheras abortivas interdum ferentia, staminibus conice confertis appressa eisque breviora vel subaequilonga; filamenta 3-seriata rosea, ad 3·5 mm. longa, exteriora inferne longe papillata, intima medio papillata, antheris polineque pallide luteis; discus inconspicuus, obscure crenulatus; ovarium e margine sat abrupte ad 1·5 mm. elevatum, lobis dorso complanatis; stigmata 5, gracilia, e medio superne attenuata, ad 3 mm. longa.

Cape Prov.: in dit. Tulbagh; Kleinberg, prope Tulbagh, Jul. 1928, *A. V. Duthie* (S.U.G. 1410—typus). Fl. Jun. 1938. Prope Worcester, Sept. 1928, *L. Verwoerd* (S.U.G. 1478). Fl. Aug. 1938.

Lampranthus paarlensis L. Bol. sp. nov. (*Scabridi*).—Planta 1 visa, 46 cm. alta (fortasse inter frutices orta itaque elongata), diffuse ramosa;

caule rigido in sectione, basi 5 mm. diam.; rami primarii brunnei, demum politi, 10–12 cm. longi, internodiis saepius ad 2 cm. longis, ad 2 mm. diam.; folia inter gracillima in sectione, saepe 1·8–2·2 cm. longa, vagina ad 1·5 mm. longa, medio ad 1·5 mm. lata diametroque, carinata, lat. visa e basi ad 2 mm. diam. superne gradatim angustata, acuta, viridia, inconspicue scaberula; flores solitarii, 3 cm. diam.; pedunculi graciles, 1·5–2·8 cm. longi; receptaculum globose obconicum, 3 mm. longum, ad 6 mm. diam.; sepala 5, omnia superne subulata, interioribus anguste atro brunneo marginata, 5 mm., vel in flore altero 5–6 mm., longa, basi 2·5–4 mm. lata; petala ca. 2-seriata, e medio vel infra inferne angustata, obtusa vel subacuta, pulchre rosea vel fere alba, 1–1·3 cm. longa, ad 1·5 mm. lata; staminodia staminibus conice confertis appressa eisque subaequilonga, dimidium inferiore albo, superiore rubra; filamenta ca. 4-seriata, interiora prope medium papillata, supra papillas rubra, antheris pollineque luteis; dimidium exterius ovarii fere planum, interius ad 0·5 mm. elevatum; stigmata 5, anguste subulata, 1·5 mm. longa.

Cape Province; in dit. Paarl; Daljosaphat, Aug. 1937, *A. J. Middlemost* (N.B.G. 1360/37). Typus.

Forma culta.—Flores ad 4 cm. diam.; petala ad 2 mm. lata; ovarium ad 1 mm. elevatum; stigmata ad 3·5 mm. longa.

Prope Wellington, “on the road to Hermon”, Sept. 1932, L. Bolus (Bolus Herb. 20163). Fl. hort. L. Bolus Sept. 1934.

A. L. Grant 2398 (Aug. 1926) et 5060 (Aug. 1929), “near Wellington”, haec species sunt, ut videtur. “Petala alba.”

The specific name refers to all the collections recorded having been made in the Paarl Division.

Lampranthus virgatus L. Bol. sp. nov. (*Scabridi*).—Plantae 2 visae, ad 43 cm. altae, caule ad 5 mm. diam.; rami primarii fere erecti, virgati brunnei, demum politi, ad 28 cm. longi, internodiis 2·5–4 cm., saepius 3 cm., longis, ramulis lateralibus brevibus, nondum evolutis, dense foliatis; folia inter gracillima in sectione, ascendentia, supra et lateraliter visa linearia acuta, carinata, saepe breviter apiculata, viridia, inconspicue scaberula, primaria 2–2·3 cm. longa, 1–1·5 mm. lata diametroque; flores solitarii vel 2–3-nati, ad 3·4 cm. diam.; pedunculi 2·5–5·5 cm. longi; receptaculum breviter obconicum, 2·5 mm. longum, ad 5 mm. diam.; sepala 5, subaequilonga, omnia superne acute vel acuminate subulata, ad 5 mm. longa, basi 3–4 mm. lata, interiora atro brunneo marginata; petala ca. 3-seriata, brevissima perpauca, e medio, vel infra, inferne angustata, obtusa, pulchre rosea, basi saturatiora, ad 1·4 cm. longa, ad 1·5 mm. lata; staminodia non bene visa, in siccis, ut videtur, staminibus breviora; filamenta 3–4-seriata, exteriora inferne

dense longeque papillata, intima supra medium papillata, ad 3 mm. longa; discus distanter profundeque crenulatus; ovarium circa marginem planum, deinde ad 0.75 mm. elevatum, lobis leviter compressis vel dorso fere complanatis; stigmata 5, anguste subulata, conspicue superne attenuata, ad 2 mm. longa.

Cape Prov.: in dit. Clanwilliam, "a mile from Alpha on the road to Algeria," Sept. 1938, *L. Bolus* (Bolus Herb. 27,100).

The genus **Cheiridopsis**, containing upwards of 90 species, appears to be confined almost entirely to the western part of the Cape Province, the most easterly station being in the Laingsburg Division (***C. cigaretifera***) and the most southerly in the Malmesbury Division (***C. purpurascens***). The great majority occur in Namaqualand. Rather many of the species are insufficiently known and an intensive study of the genus with ample material representing the various stages in the growth of the plant, as well as the modifications resulting from cultivation, will probably reduce the number of the existing ones. On the other hand, with the more intensive collecting of these days there is every prospect of additional new discoveries. The genus is most closely allied to **Cephalophyllum**, and there seem to be border-line species, the *almost* infallible distinction being the limitation in the number of the foliage-leaves (apart from the bracts) on the *flowering branchlet*—one pair in most of the species and rarely more than two pairs in the few exceptional ones. It may be divided roughly into 6 groups based entirely upon vegetative characters, the largest group by far being the "sleeved" ones (*cheiris* = sleeve, *opsis* = appearance). The following key may serve to indicate the main distinctions.

KEY TO THE SPECIES

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| 1. Branches with $\pm$ elongated internodes—e.g. <i>C. aspera</i> , <i>C. pilosula</i> | ELONGATAE |
| 1. Branches with internodes enclosed in the leaf-sheaths, or sometimes exerted in cultivation. | |
| 2. Flowering branchlets 4-leaved—e.g. <i>C. bibracteata</i> , <i>C. turbinata</i> | BIBRACTEATAE. |
| 2. Flowering branchlets 2-leaved. | |
| 3. Leaves turgidly succulent—e.g. <i>C. pillansii</i> , <i>C. crassa</i> | TURGIDAE |
| 3. Leaves not turgidly succulent. | |
| 4. Leaf pairs similar in form, $\pm$ hardening with age and not forming "sleeves". | |
| 5. Leaves rather soft and succulent, entire, rather short—e.g. <i>C. cuprea</i> , <i>C. speciosa</i> | CUPREAE. |
| 5. Leaves rather hard, sometimes dentate, often pallid and among the largest leaves in the genus—e.g. <i>C. candidissima</i> , <i>C. dentata</i> | GRANDES. |
| 4. Leaf-pairs dissimilar in that the sheath in the lower pair is shorter than in the upper which forms the "sleeves"—e.g. <i>C. tuberculata</i> , <i>C. peculiaris</i> | EUCHEIRIDOPSIS. |

The following collections of **Cheiridopsis** which have flowered recently in the Karoo Garden appear to have been considerably modified by cultivation and are probably:

C. aspera L. Bol. (*Elongatae*) with the branches up to 1 cm. in diameter; one pair of leaves 6.5 cm. long, 1.5 cm. in diameter, another pair up to 8 cm. long, 7 mm. in diameter; petals up to 3 cm. long. Locality and collector unknown. K.G. 192/59. Fl. Aug. 1959.

C. turbinata L. Bol. (*Bibracteatae*). A fine plant 23 cm. in diameter; the lower leaves with very convex sides, up to 12 cm. long, ad 2.2 cm. in diameter; petals up to 3.7 cm. long.

Namaqualand; "10 miles N.E. of Bitterfontein," R. C. Littlewood. K.G. 226/60. Fl. 21.7.61. This extends the range of distribution and is the most southerly station recorded for this species.

NOTE.—We are indebted to Mr. G. D. Rowley for drawing our attention to the fact that the generic name **Maughania** N. E. Br. is invalid, being a later homonym of **Maughania** used validly by Jaume Saint-Hilaire in 1813. A new name is therefore required for it and **Maughaniella** is suggested on account of its small size.

Maughaniella L. Bol. nom. nov. vice *Maughania* N. E. Br., Journ. Cact. and Succ. Soc. of America, II : 389 (1931), nec J. St.-Hil., Nouv. Bull. Soc. Philomatique, Paris, 3 : 216 (1813).

M. luckhoffii (N. E. Br.) L. Bol., comb. nov.

Cheiridopsis littlewoodii L. Bol. sp. nov. (*Bibracteatae*).—Planta 1 visa, robusta, 15 cm. diam., caule 1.3 cm. diam.; ramuli 6-foliati, in sterilibus foliis supremis interdum nondum bene evolutis; partes herbaceae minute velutino pubescentes, glauco virides; folia supra plana, superne e medio angustata, sat conspicue rubre apiculata, primo lateraliter compressa acuteque carinata, carina interdum prope apicem 1—4 denticulata, cum aetate dorso rotundata, lat. visa non, vel leviter, angustata vel interdum leviter ampliata, obtusa vel rotundata vel oblique truncata, pari infimo 4—5 cm., medio 6—7 cm., supremo nondum evoluta ad 6 cm., longo, vagina purpureo rosea, ad 2 cm. longa; ramulus floriferus 1 visus, sine vagina folia infima 5.5 cm., media 6 cm., suprema 7.5 cm., longa; pedunculus in receptaculum globosae obconicum, 7 mm. longum, 13 mm. diam., gradatim transeuns, 4 cm. longus, 5—7 mm. diam.; bracteae basales, 3.3 et 3.6 cm. longae, 6 mm. et 7 mm. diam.; sepala 5, 1.1—1.3 cm. longa, basi 7—15 mm. lata, exteriora superne carinata, apice acute subulata, anguste marginata, intima apice obtuse subulata, late mar-

ginata; petala dense 6—7-seriata, exteriora inferne leviter angustata acuta vel obtusa, supra pallidissime cupreo lutea, infra pallidissime cupreo rosea, 2—3 cm. longa, 1—1.5 mm. lata; filamenta ca. 4-seriata, alba, ad 6 mm. longa, antheris pollineque stramineis; ovarium supra planum; stigmata 18, matura late patentia, superne attenuata recurvaque, fere ad 4 mm. longa.

Cape Prov.: in dit. Vanrhynsdorp; "21 miles on the Kliprand turn-off on the Vanrhynsdorp-Bitterfontein road," May 1960, *R. C. Littlewood*. Karoo Garden 405/60. Fl. Aug. 1961.

This plant is remarkable in having 3 pairs of leaves in the flowering branchlet, a number not hitherto recorded in **Cheiridopsis**. It is therefore anomalous in this section, and it is placed here tentatively until more material is available to prove this an exceptional occurrence. The number of the stigmas is also unusual, as it is in **C. candidissima** where 17—19 are recorded, 10 being the usual number.

NOTE.—The type specimens of all new species and new varieties described in this paper are in the Bolus Herbarium, University of Cape Town, Rondebosch.

(*To be continued.*)